

## **Remarks**

### **Summary of Interview**

The undersigned conducted a telephonic interview with Examiners Buckle, Jr. and Glessner on December 19, 2008. The undersigned thanks the Examiners for that opportunity. The undersigned presented why Applicants believe that the combination of U.S. Pat. No. 5,216,863 and European Patent Publication EP022244851 did not render the pending claims obvious. More specifically, the presentation focused on the importance of the configuration of the male and female engagement portions to permit the form element to lie within a plane for creation of a flat surface engagement and the particular configurations being T-Shaped fins and slots. The Examiners disagreed. The undersigned then addressed the possibility of additional claim language concerning the importance of that configuration in conjunction with the insert panel 22, referring particularly to Fig. 7 of the application. The Examiners indicated that amended claims would require additional searching. The undersigned also referred the Examiners to copending patent application 10/531,622 with Examiner Safavi.

### **Status of Copending Application**

In Applicants' Information Disclosure Statement of September 12, 2005, Applicants identified Application '622 as also filed by Applicants. Both this application and that Application '622 claim priority from the same Provisional Patent Application 60/419,469.

Application '622 with claims directed to the insert panel with male engagement portions to mate with the female engagement portions of the elongated octagonal tubular form element of this application has been examined again, and rejected again by Examiner M. Safavi applying both §112 rejections and §102 rejections using U.S. Pat. Nos. 5,860,262 (Johnson); 5,740,648 (Piccone); 6,167,669 (Lanc); and 5,216,863 (Nessa).

### **Supplemental Information Disclosure Statement**

The undersigned submits for consideration by the Office a copy of an abandoned Norwegian patent application, laid open on June 24, 2002, and a photocopy of a photo of a prototype asserted by the author of the patent application to have been shown, used, or offered for sale in countries including the United States after December 21, 2000 and before the filing of this patent application. There is no corroboration to the assertion, especially as to when such USA activity may have occurred. For purposes of this examination, the undersigned requests this supplemental information be considered as prior art, even if less relevant to the pending claims than other references of record.

During EFS-Web, the undersigned has made payment for consideration of this supplemental information.

### **Claim Rejections**

Claims 1-18 were rejected by the Office as unpatentable in view of U.S. Pat. No. 5,216,863 (Nessa) and European Patent Publication EP022244851 (Strabag). Applicants amend their claims and request reconsideration.

Starting with a comparison of Fig. 2 of Nessa (Examiner annotated in the Office Action) with Fig. 1 of Applicants' application, there are several significant structural differences between Nessa and Applicants' patentable invention. Strabag does not supply what Nessa lacks.

#### **1. How Many Male and Female Engagement Portions**

Nessa's octagonal structure has *four* outwardly extending *male* engagement portions and *four* outwardly extending *female* engagement portions. Applicants have *six* inwardly extending female engagement portions and *two* outwardly extending male engagement portions. Nothing in either Nessa nor Strabag discloses the concept that *six* female engagement portions must be inwardly extending, internally of the tubular boundary. At most Strabag assists Nessa to place the *four* outwardly extending female

engagement portions into an inward position on the eastward and southward faces of Fig. 2 of Nessa. Nothing in either Nessa nor Strabag identifies a desire, realized by Applicants, to place *all six* female engagement portions internally of the tubular boundary.

It is asserted that Nessa does not even have six female engagement portions, in spite of the annotation placed on Fig. 2 by the Examiner. For avoidance of doubt, Applicants call out their male engagement portions in the claims as T-shaped fins (Page 11, Line 26) and their female engagement portions as T-shaped slots (Page 11, Line 27.) This obviates a characterization by the Office that an interior wall is a male engagement portion or that the back side of a T-shaped projection is a female engagement portion. Applicants rely on fins and slots as a means to identify their structure of mating engagement between male and female engagement portions.

As seen in Figs. 2-4, Applicants can mate their T-shaped fins and their T-shaped slots with their male/female engagement relationships permitting identification of common loci of each connection with the placement of each locus at the vertices of a regular octagon. (Text bridging Pages 11 and 12). The importance of this common loci should not be ignored. As explained in detail on Page 12 of Applicants' specification in relation to Figs.2-4, permitted commonality of each male and female locus "x" in each of Figs. 2-4, resulting in assured connection with common loci for each connection at each of the vertices of the form elements in the formwork assembly. This makes the form elements capable of being truly modular when joined into an assembly, relying on the location of such connections being at vertices of the form elements, rather than on wall faces as taught by Nessa.

Moreover, one of ordinary skill in the art would not find from Strabag *which* engagement portions of Nessa to extend outwardly and *which* to extend inwardly. As seen in Fig. 2 of Nessa, Nessa's T-shaped fins and T-shaped slots are equal in number.

Applicants have six T-shaped female slots and only two T-shaped male fins, relying on loci of connection at vertices for modular construction. With 75% of the

vertices in the octagon having T-shaped slots, Applicants have patentably surpassed anything Nessa discloses or suggests.

2. Where the Male and Female Engagement Portions are Positioned on the Octagonal Form Element.

Moving clockwise in Fig. 2, Nessa's engagement portions reside in pairs on the eastward face, in pairs on the southward face, in pairs on the westward face, and in pairs on the northward face (which is otherwise open between the two extending T-shaped elements.) Applicants disagree with the Office that the Nessa engagement portions are located *at* the vertex merely because they *might start at* the vertex. Certainly the loci of connection for Nessa are along the walls, not at the junction or vertices between the walls. That alone is a patentable distinction.

Applicants permit identification of common loci of each connection with the placement of each locus of the male and female engagement portions at the vertices of a regular octagon. Please see also Figs. 2-4.

The Office asserts no unpredictable results arise from Applicants' claimed invention. The unpredictable results, found neither in Nessa or Strabag, are that having six female engagement portions mating at loci within vertices of the regular octagon of the form element permits any other form element with its two male engagement portions to mate on any of the 5 wall faces flanked on either side by female engagement slots. Strabag is a circular form. Nessa is an octagonal form, but its combination of male and female engagement portions *located on the eastward, southward, westward, and northward walls* do not and can not permit a mating of two form elements on any other walls.

Applicants symmetrical octagonal configuration of six consecutive female engagement portions (T-Shaped slots) at the vertices between five consecutive wall faces allows any two male engagement portions from another octagonal form element to mate at any two female engagement portions, whether at the cardinal faces of east, west or north (using Fig. 1 of Applicants' specification showing the open face on the south side) or also at the non-cardinal faces of northeast and northwest. Regardless of which

wall face is to be mated to another form element, each of the five of them is equally ready and able to mate in a connection at the vertices flanking the wall face chosen. That results in a modular, versatile form element useful in ways that Nessa's structure can not provide. Stated another way, Applicants have 40% more wall faces available for mating than Nessa because Applicants use six female engagement slots at six vertices adjoining five wall faces. Because Nessa uses wall faces, there is no orientation of connection possible at those two walls that do not bear a engagement fin or slot but are flanked by walls that do have engagement fins or slots.

### 3. Why the Male and Female Engagement Portions are Positioned on Vertices of the Octagonal Form Element

As seen in Fig.5, three form elements can combine to make a right angle (90°) turn. As seen in Fig. 7, two or more form elements can combine to continue the form elements in a linear direction. As explained above, two form elements can combine to make a 120° angle turn. (Three form elements can also combine in two consecutive 120° angle turns to result in a 90° change of direction for the combined form elements.) Nessa is not that versatile because Nessa has its locations of connections on wall faces, not in the center of vertices. Strabag can not do that, because Strabag is concerned with a circular formwork connection.

The other thing which neither Nessa nor Strabag can do is to provide a configuration on two mated octagonal form elements where unused female engagement portions are available to close off a triangular area by the use of an insert panel 22 as seen in Fig. 6. The insert panel has the same male engagement portions (T-Shaped fins) as are located on the octagonal form element. Thus, as seen in Figs. 7 and 8, one can mate insert panels, having the same male fins, into female engagement portions of adjoining octagonal form elements such that a flat wall surface is achieved.

Applicants also refer the Office to Page 14, Lines 12-30 and Page 15, Lines 1-8. Applicants also refer the Office to Page 15, Lines 22-28 for a definition of "substantially flat wall."

### Conclusion

No reference of record discloses or suggests, alone or in combination, the structure of a form element as a regular (equal-sided) octagon having seven wall faces and one open face, with the ability to mate two form elements on any of five adjacent wall faces of the one form element. This is because Applicants configured six adjacent vertices to each have a female engagement portion adapted as a slot so that all connections can be internal of the wall of the form element and any of the five adjacent wall faces could be selected for engagement.

No reference of record discloses or suggests, alone or in combination, the common loci of connection of two form elements at the vertices of those octagonal form elements by use of male and female engagement portions in a fin and slot adaptation, where both the fin and the slot have a locus of connection which is common during their engagement or connection at vertices of the adjacent octagonal form elements being mated. This common loci truly places the point of connection between two form elements within a vertex of both form elements, not along a wall face or even at a spot on a wall adjoining a vertex.

No reference of record discloses or suggests, alone or in combination, female engagement portions adapted as slots, located at vertices of 45° angles between adjoining wall faces, which after adjoining form elements are mated, can be used to close off a triangular area by the engagement with an insert panel having male engagement portions just like the male engagement portions on the form elements themselves, with the result that a substantially flat wall surface is achieved by combination of wall face of one form element, insert panel, and wall face of the second form element, all joined by fin-and-slot engagement in the same manner as the two form elements themselves and relying on the common loci of each connection made at the vertex of a regular octagon.

The result of Applicants' invention is a versatile regular (equal sided) octagonal form element that permits both engagement at any of five wall faces and also, when in

linear engagement, a flat wall surface through the addition of an insert panel having the same male engagement fins as do the octagonal form elements themselves.

The claims as amended are patentable over the combination of Nessa and Strabag and over any of the other references of record.

Applicants request a Notice of Allowance for their pending claims. If there is anything that prevents a Notice of Allowance, the Examiner is encouraged to phone the undersigned.

Respectfully submitted by:

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Date

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